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IKEDA TOKUJI**(54) **ENZYME ELECTRODE**

(57) Abstract:

PURPOSE: To detect the concn. of a substrate without being affected by an oxygen partial pressure by using an electrode into which ubiquinone is incorporated as an electron transmission medium and substrate sensing part consisting of the dehydrogenase enzyme immobilized on the surface of said electrode.

CONSTITUTION: The ubiquinone (Qn) having 7.9 or 10 isoprene unit (n) is mixed with 3ml liquid paraffin and

5g graphite powder, respectively. Such mixture is packed into the end of a glass tube. The surface is then smoothed by wax paper. The graphite paste electrode mixed with the ubiquinone is immersed in a preserving soln. of D-gluconic acid dehydrogenase. The electrode is then cleaned with an acetic acid buffer soln. The substrate is detectable with high sensitivity without adding such an electron transmission medium as oxygen into the measuring liquid if the electrode obtd. in the above-mentioned manner is used.

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